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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,687	01/25/2002	Gyula Dekany	267979-0002US	7123

7590 03/23/2004

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EXAMINER

KHARE, DEVESH

ART UNIT

PAPER NUMBER

1623

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	09/889,687	Applicant(s)	DEKANY ET AL.
Examiner	Devesh Khare	Art Unit	1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 06 October 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 12-18, 21 and 22 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 12-18, 21 and 22 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

Applicant's Amendment and remarks filed on 10/06/03 are acknowledged.

Claims 12, 14, 16, and 17 have been amended. Claims 19 and 20 have been cancelled.

Claims 12-18, 21 and 22 are currently pending in this application.

**35 U.S.C. 112, second paragraph rejection**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

Claims 12-18 , 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention of record.

(A) In the absence of the specific moieties intended to effectuate modification by "substitution" or attachment to the chemical core claimed, the term "substituted" in all occurrences renders the claims in which it appears indefinite wherein applicant fails to articulate by chemical name, structural formula or sufficiently distinct functional language, the particular moieties applicant regards as those which will facilitate substitution, requisite to identifying the compound of matter claimed.

(B) The phrase, in claim 12, "an orthogonally protected monosaccharide", is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant should consistently set forth the identity of the orthogonally protected monosaccharide.

(C) The term "sets" of protecting groups are not defined in all occurrences renders the claims in which it appears indefinite.

(D) Claim 17 is rejected as being incomplete for omitting essential steps of the synthesis, such omission amounting to a gap between the steps. The steps in the glycosylation reaction are missing.

(E) The use of terms "A-E" in all the occurrences is vague and indefinite. The term "A-E" does not define a chemical structure or chemical formula in the claim.

Claims which depend from an indefinite claim which fail to obviate the indefiniteness of the claim from which they depend are also seen to be indefinite and are also rejected for the reasons set forth *supra*.

(F) Phrases "as defined" and "as defined herein" are indefinite in all the occurrences where the specific location of the definition referenced is not particularly pointed out or distinctly claimed.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-18, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (EP 578,112 ) of record.

Yamada et al. disclose a monosaccharide derivative of General Formula II where A is a leaving group at anomeric center represented by the group –SR (R is alkyl) on page 5, compound 1, page 8, compound 33 and page 7, formula III. In Examples 1 and 2 (pages 13 & 14), a method of synthesis of glycoconjugates of thio- $\beta$ -D-glucopyranoside is disclosed. Also, in claims 5 and 7, a method of synthesis of a disaccharide of formula II from thioglycoside is disclosed. In the absence of the defined protecting group sets 1,2, 6 and 8 and terms A-E in claims 12-18, 21 and 22, the Yamada et al. reference is encompassed by the applicants claims.

***Rejection Maintained***

Rejection of claims 12-18, 21 and 22, under 112, second paragraph for the reasons of record.

***Response to Arguments***

Applicant's arguments filed on 10/06/03 traversing the rejection of claims 12-18, 21 and 22 under 112, second paragraph and under 35 U.S.C. 102(b) have been fully considered but they are not persuasive.

Applicants argue that "there is nothing indefinite in the term "substituted". The skilled artisan knows substituted means modified by the attachment of something (moiety) to a core. Applicant's claims fail to particularly point out such moieties. Metes and bounds of the moieties applicant intends can not be readily ascertained. The presence of the term "substituted" in other document is noted. It is the deficiency in this application which is at issue.

Applicants argue that "compounds in Yamada et al. are not orthogonally protected monosaccharide building blocks". Yamada et al. disclose a monosaccharide derivative of General Formula II where A is a leaving group at anomeric center represented by the group –SR (R is alkyl) (see page 5, compound 1; page 8, compound 33; and page 7, formula III). Also, a method of synthesis of glycoconjugates of thio- $\beta$ -D-glucopyranoside from a thioglycoside precursor is disclosed (Examples 1 and 2 (pages 13 & 14). It is noted that in the absence of the defined protecting group sets 1,2, 6 and 8 and terms A-E in claims 12-18, 21 and 22, the Yamada et al. reference is encompassed by the applicants claims.

**2. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

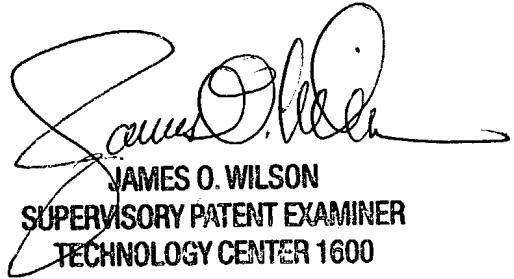
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Examiner should be directed to Devesh Khare whose telephone number is (571)272-0653. The examiner can normally be reached on Monday to Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, Supervisory Patent Examiner, Art Unit 1623 can be reached at (571)272-0661. The official fax phone numbers for the organization where this application or proceeding is assigned is (703) 308-4556 or 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Devesh Khare, Ph.D.,JD(3Y).  
Art Unit 1623  
March 1,2004



JAMES O. WILSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600